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Benjamin

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(54) **ULTRASONIC SPARSE IMAGING ARRAY**

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310/334

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(57) **ABSTRACT**

An ultrasonic sparse imaging array includes a substrate of an acoustically absorptive material, through which extend a multiplicity of holes. Adhesive sheets, having selectively conductive regions, are fixed to a first side of the substrate, and are each disposed over a first end of one of the holes. Plano-convex shaped transducer elements, having a wide acoustic field of view, are disposed on each of the sheets, each of the sheets serving as a positive electrode and providing a mechanical and electrical connection between the substrate and a multiplicity of transducer elements. Plating is fixed to the first side of the substrate and covers each of the transducer elements and comprises a negative electrode. A conductive epoxy fills each of the holes and a power source is in electrical communication with the negative electrode.

15 Claims, 2 Drawing Sheets

